

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-47 (Canceled)

Claim 48 (Previously presented) A method of enhancing wound healing in a patient, the method comprising administering an effective amount of a mutein of human basic fibroblast growth factor or a biologically active peptide thereof,

wherein the mutein of human basic fibroblast growth factor, or a biologically active peptide thereof, comprises the substitution of a neutral and/or hydrophobic amino acid for one or more of the following: (a) Glutamate 89; or (b) Aspartate 101; or (c) Leucine 137.

Claim 49 (Previously presented) The method of claim 48, wherein the wound healing is selected from the group consisting of burns, surgical incisions, lacerations, ulcers, and traumas.

Claim 50 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for [[Glu89]] [Glu⁸⁹].

Claim 51 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Asp101 [Asp¹⁰¹].

Claim 52 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Leu137 [Leu¹³⁷].

Claim 53 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for [[Glu89]] [Glu⁸⁹].

Claim 54 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Asp101 [Asp¹⁰¹].

Claim 55 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Leu137 [Leu¹³⁷].

Claim 56 (Currently amended) The mutein method of claim 48, wherein a neutral amino acid is defined as alanine and a hydrophobic amino acid is defined as tyrosine.

Claim 57 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr¹⁰¹] [Tyr¹⁰¹].

Claim 58 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr¹³⁷] [Tyr¹³⁷].

Claim 59 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr⁸⁹, 101] [Tyr⁸⁹, 101].

Claim 60 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr⁸⁹, 137] [Tyr⁸⁹, 137].

Claim 61 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr¹⁰¹, 137] [Tyr¹⁰¹, 137].

Claim 62 (Currently amended) The mutein method of claim 48, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr⁸⁹, 101-137] [Tyr⁸⁹, 101, 137].

Claim 63 (Currently amended) The mutein method of claim 48, wherein the mutein is administered topically.

Claim 64 (Currently amended) The mutein method of claim 48, wherein the mutein is administered parenterally.

Claim 65 (Previously presented) A method of stimulating fibroblast cell proliferation in a patient, wherein the patient has heart disease, the method comprising administering an effective amount of a mutein of human basic fibroblast growth factor or a biologically active peptide thereof,

wherein the mutein of human basic fibroblast growth factor, or a biologically active peptide thereof, comprises the substitution of a neutral and/or hydrophobic amino acid for one or more of the following: (a) Glutamate 89; or (b) Aspartate 101; or (c) Leucine 137.

Claim 66 (Previously presented) The method of claim 65, wherein the patient has coronary artery disease.

Claim 67 (Previously presented) The method of claim 65, wherein the patient has myocardial infarction.

Claim 68 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for [[Glu89]][Glu⁸⁹].

Claim 69 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Asp101 [Asp¹⁰¹].

Claim 70 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Leu137 [Leu¹³⁷].

Claim 71 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for [[Glu89]][Glu⁸⁹].

Claim 72 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Asp101 [Asp¹⁰¹].

Claim 73 (Currently amended) The mutein of claim 65, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Leu137 [Leu¹³⁷].

Claim 74 (Currently amended) The mutein method of claim 65, wherein a neutral amino acid is defined as alanine and a hydrophobic amino acid is defined as tyrosine.

Claim 75 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr101][Tyr¹⁰¹].

Claim 76 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr137][Tyr¹³⁷].

Claim 77 (Currently amended) The mutein method of claim 65, which is human basic fibroblast growth factor [Tyr^{89, 101}][Tyr^{89, 101}].

Claim 78 (Currently amended) The mutein method of claim 65, which is human basic fibroblast growth factor [Tyr^{89, 137}][Tyr^{89, 137}].

Claim 79 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr101, 137][Tyr^{101, 137}].

Claim 80 (Currently amended) The mutein method of claim 65, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr^{89, 101, 137}][Tyr^{89, 101, 137}].

Claim 81 (Currently amended) The ~~mutein~~ method of claim 65, wherein the mutein is administered topically.

Claim 82 (Currently amended) The ~~mutein~~ method of claim 65, wherein the mutein is administered parenterally.

Claim 83 (Previously presented) A method of stimulating fibroblast cell proliferation in a patient, wherein the patient has peripheral vascular disease, the method comprising administering an effective amount of a mutein of human basic fibroblast growth factor or a biologically active peptide thereof,

wherein the mutein of human basic fibroblast growth factor, or a biologically active peptide thereof, comprises the substitution of a neutral and/or hydrophobic amino acid for one or more of the following: (a) Glutamate 89; or (b) Aspartate 101; or (c) Leucine 137.

Claim 84 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for [[Glu89]] [Glu⁸⁹].

Claim 85 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Asp101 [Asp¹⁰¹].

Claim 86 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Leu137 [Leu¹³⁷].

Claim 87 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for [[Glu89]] [Glu⁸⁹].

Claim 88 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Asp101 [Asp¹⁰¹].

Claim 89 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Leu137 [Leu¹³⁷].

Claim 90 (Currently amended) The ~~mutein~~ method of claim 83, wherein a neutral amino acid is defined as alanine and a hydrophobic amino acid is defined as tyrosine.

Claim 91 (Currently amended) The ~~mutein~~ method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr101] [Tyr¹⁰¹].

Claim 92 (Currently amended) The mutein method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr¹³⁷] [Tyr¹³⁷].

Claim 93 (Currently amended) The mutein method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr^{89, 101}] [Tyr^{89, 101}].

Claim 94 (Currently amended) The mutein method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr^{89, 137}] [Tyr^{89, 137}].

Claim 95 (Currently amended) The mutein method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr^{101, 137}] [Tyr^{101, 137}].

Claim 96 (Currently amended) The mutein method of claim 83, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr^{89, 101-137}] [Tyr^{89, 101, 137}].

Claim 97 (Currently amended) The mutein method of claim 83, wherein the mutein is administered topically.

Claim 98 (Currently amended) The mutein method of claim 83, wherein the mutein is administered parenterally.

Claim 99 (Previously presented) A method of stimulating fibroblast cell proliferation in a patient, wherein the patient has neural injury, the method comprising administering an effective amount of a mutein of human basic fibroblast growth factor or a biologically active peptide thereof,

wherein the mutein of human basic fibroblast growth factor, or a biologically active peptide thereof, comprises the substitution of a neutral and/or hydrophobic amino acid for one or more of the following: (a) Glutamate 89; or (b) Aspartate 101; or (c) Leucine 137.

Claim 100 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for [Glu⁸⁹] [Glu⁸⁹].

Claim 101 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Asp¹⁰¹ [Asp¹⁰¹].

Claim 102 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Leu¹³⁷ [Leu¹³⁷].

Claim 103 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for [[Glu⁸⁹]] Glu⁸⁹.

Claim 104 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Asp¹⁰¹ Asp¹⁰¹.

Claim 105 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Leu¹³⁷ Leu¹³⁷.

Claim 106 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] a neutral amino acid is defined as alanine and a hydrophobic amino acid is defined as tyrosine.

Claim 107 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr¹⁰¹ Tyr¹⁰¹.

Claim 108 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr¹³⁷ Tyr¹³⁷.

Claim 109 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr^{89, 101} Tyr^{89, 101}.

Claim 110 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr^{89, 137} Tyr^{89, 137}.

Claim 111 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr^{101, 137} Tyr^{101, 137}.

Claim 112 (Currently amended) The mutein method of claim 99, wherein the mutein [[which]] is human basic fibroblast growth factor Tyr^{89, 101, 137} Tyr^{89, 101, 137}.

Claim 113 (Currently amended) The mutein method of claim 99, wherein the mutein is administered topically.

Claim 114 (Currently amended) The mutein method of claim 99, wherein the mutein is administered parenterally.

Claim 115 (Previously presented) A method of stimulating fibroblast cell proliferation in a patient, wherein the patient has ischemia, the method comprising administering an effective amount of a mutein of human basic fibroblast growth factor or a biologically active peptide

thereof,

wherein the mutein of human basic fibroblast growth factor, or a biologically active peptide thereof, comprises the substitution of a neutral and/or hydrophobic amino acid for one or more of the following: (a) Glutamate 89; or (b) Aspartate 101; or (c) Leucine 137.

Claim 116 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for [Glu89] [Glu⁸⁹].

Claim 117 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Asp101 [Asp¹⁰¹].

Claim 118 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a hydrophobic amino acid for Leu137 [Leu¹³⁷].

Claim 119 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for [Glu89] [Glu⁸⁹].

Claim 120 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Asp101 [Asp¹⁰¹].

Claim 121 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] comprises the substitution of a neutral amino acid for Leu137 [Leu¹³⁷].

Claim 122 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] a neutral amino acid is defined as alanine and a hydrophobic amino acid is defined as tyrosine.

Claim 123 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr101] [Tyr¹⁰¹].

Claim 124 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr137] [Tyr¹³⁷].

Claim 125 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr89, 101] [Tyr^{89, 101}].

Claim 126 (Currently amended) The mutein method of claim 115, wherein the mutein [[which]] is human basic fibroblast growth factor [Tyr89, 137] [Tyr^{89, 137}].

Preliminary Amendment - First Action Not Yet Received

Claim 127 (Currently amended) The mutein method of claim 115, wherein the mutein
[[which]] is human basic fibroblast growth factor [Tyr¹⁰¹, 137] [Tyr^{101, 137}].

Claim 128 (Currently amended) The mutein method of claim 115, wherein the mutein
[[which]] is human basic fibroblast growth factor [Tyr^{89, 101-137]} [Tyr^{89, 101, 137]}.

Claim 129 (Currently amended) The mutein method of claim 115, wherein the mutein is
administered topically.

Claim 130 (Currently amended) The mutein method of claim 115, wherein the mutein is
administered parenterally.